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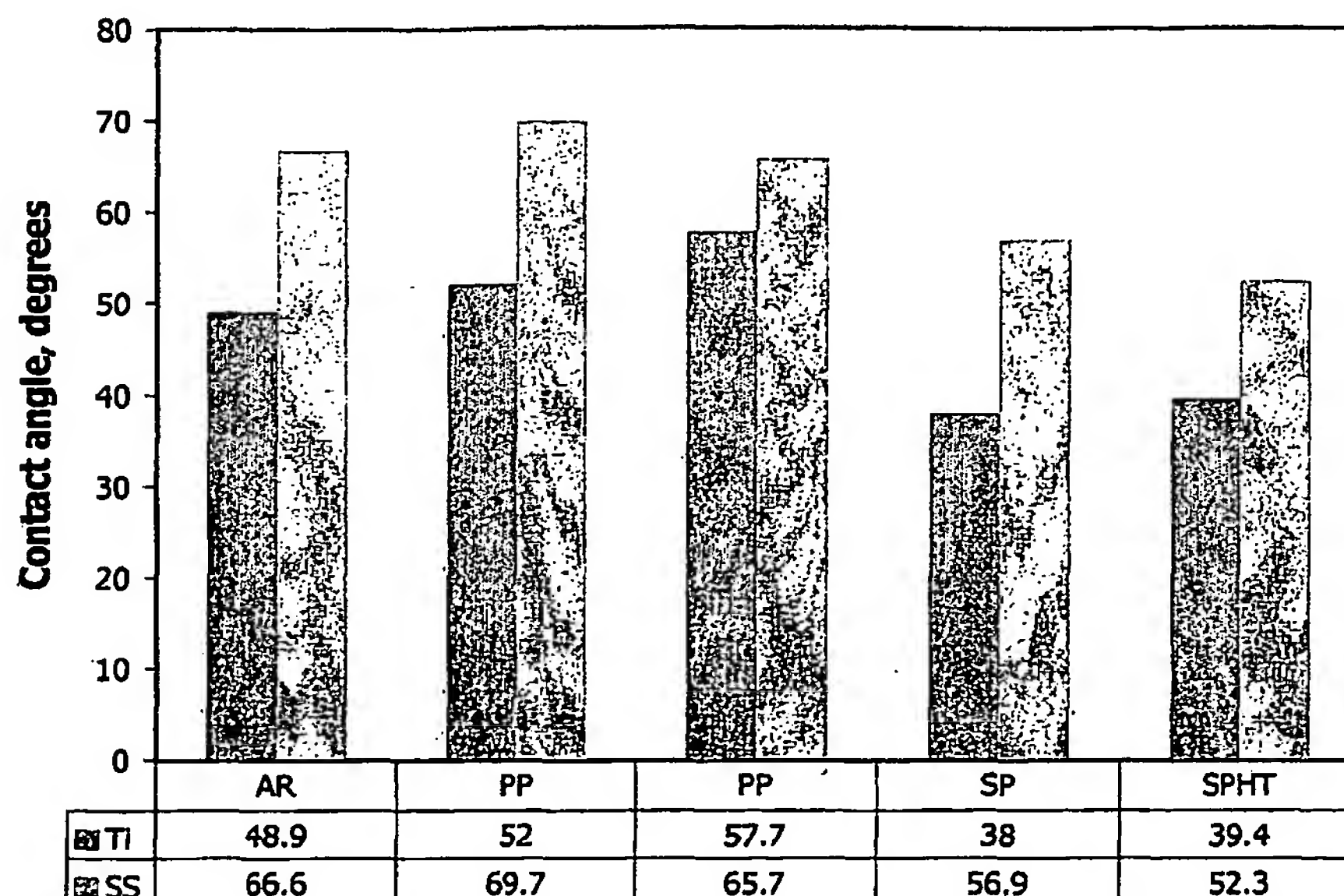
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(54) Title: **BIOACTIVE COATING OF BIOMEDICAL IMPLANTS**



(57) Abstract: A method of forming a bioactive coating on a biomedical implant, the method including the step of contacting at least part of the surface of the implant prior to implantation with a plasma gas containing a reactive hydroxylating oxidant species. The step of contacting the surface of the implant prior to implantation with a plasma gas containing a reactive hydroxylating oxidant species may be preceded by a step of exposing the implant to an organosilane or organosilicate species to form a silica coating on at least part of the implant prior to contact with the oxidant species.

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